

REMARKS

Favorable reconsideration of this application is respectfully requested.

Initially, applicants note the coversheet for the outstanding Office Action checked box 10 indicating the drawings filed April 12, 2004 were objected to. However, the Office Action contains no basis for an objection to the drawings. Applicants believe that objection was erroneously indicated and clarification is requested if any drawing objections are being made.

Claims 5-7, 9, 10, 14, 16, and 17 are pending in this application. Claims 1-4, 12, 13, 18, and 19 are canceled by the present response without prejudice. No claims are amended.

Claims 1-4, 12, 13, 18, and 19 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. patent 6,726,488 to Shirasaki (herein "Shirasaki '488") in view of U.S. patent 4,890,155 to Miyagawa et al. (herein "Miyagawa"). Claims 5, 10, and 14 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. patent 6,522,214 to Harju et al. (herein "Harju"). Claims 6, 7, and 9 were rejected under 35 U.S.C. § 103(a) as unpatentable over Harju in view of Shirasaki '488. Claims 16 and 17 were rejected under 35 U.S.C. § 103(a) as unpatentable over Harju in view of Miyagawa.

Addressing first the rejection of claims 1-4, 12, 13, 18, and 19 under 35 U.S.C. § 103(a) as unpatentable over Shirasaki '488 in view of Miyagawa, that rejection is obviated by the present response as claims 1-4, 12, 13, 18, and 19 are canceled by the present response without prejudice.

Addressing now the rejection of claims 5, 10, and 14 under 35 U.S.C. § 103(a) as unpatentable over Harju, the further rejection of claims 6, 7, and 9 further in view of Shirasaki '488, and the further rejection of claims 16 and 17 further in view of Miyagawa, those rejections are traversed by the present response.

Applicants respectfully submit each of independent claims 5 and 14, and thereby the claims dependent therefrom, positively recite features neither taught nor suggested by the

applied art. Specifically, each of those claims recites a feature “wherein a width of said third signal line is set to be between the width of said first signal line and said second signal line”. With such a claimed structure it follows that the first and second signal lines have different widths; which results because the third signal line must be thinner than one of the first and second signal lines and thicker than the other of the first and second signal lines, and thereby the first and second signal lines must have a different width.

The applicants of the present invention recognized that if a first high frequency transmission line and a second high frequency transmission line, which have different widths, are simply connected, a mismatch of impedances is produced in the connection portion resulting from the difference in signal line widths of the first and second transmission lines. To address such a situation, in the inventions recited in independent claims 5 and 14, a third signal line is provided between first and second signal transmission lines, and the width of the third signal line is between the width of the first signal line and the width of the second signal line. As a result an impedance mismatch at the connection portion of the first and second signal lines can be prevented by the configuration of the third signal line.

Harju does not disclose or suggest any features even similar to that discussed above in the claimed invention.

Harju is directed to an electrical transmission line arrangement with a cross-over in which if first and second strip-lines are located in the same plane and directions of the first and second strip-lines are crossed, the first and second strip-lines conflict with each other. To address such a situation, in Harju first and second strip-lines are positioned in different layers at a crossing point, as shown for example in Figures 1 and 4 therein. Additionally, in Harju the distance between a second conductor section and a second ground plane is substantially the same as the distance between a first conductor section and a first ground plane section.

However, Harju is not directed to a device even similar to the claimed features in that Harju does not address any indication of different widths of first, second, and third signal lines.

As noted above, the claimed inventions can particularly address a situation in which first and second signal lines, which have different widths, are connected by a third signal line, and specifically “a width of said third signal line is set to be between the width of said first signal line and said second signal line”. Harju does not disclose or suggest any such features.

Moreover, the basis for the outstanding rejection is improper in completely disregarding such positively recited claim features.

In addressing the above-noted features the outstanding Office Action states:

One of ordinary skill in the art would have found it obvious to set the width of the third signal line to be between the width of the first and second signal lines, since such modification would involve a mere change in the size of a component. A change in [size] is generally recognized as being within the level of ordinary skill in the art.<sup>1</sup>

The above-noted basis for the outstanding rejection is improper in many aspects.

First, the claims do not merely involve a mere change in size of a component. As noted above, in a situation in which first and second signal lines have different widths a mismatch of impedances may be produced at a connection portion. By controlling a width of a third signal line to be between that of the first and the second signal lines, such a mismatch of an impedance can be avoided. Clearly such properties are not mere changes in size of a component, but instead are specific design attributes of the claimed signal lines that provide significant benefits and results. The basis for the outstanding rejection misunderstands the significant attributes of the claimed features, and improperly disregards the claimed features.

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<sup>1</sup> Office Action of July 14, 2006, page 6, second paragraph.

Moreover, the above-noted basis for the outstanding rejection clearly indicates that no proper *prima facie* case of obviousness has been established. As noted in MPEP § 2143:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The basis for the outstanding rejection has not met any of the three criteria noted above to establish proper *prima facie* case of obviousness.

First, there is clearly no suggestion or motivation in any art or knowledge readily available to the art to modify Harju to meet the claimed limitations. Harju is not even directed to addressing a problem that the present invention solves, namely of preventing a mismatch between first and second signal lines of different widths. Secondly, there is no indication that any benefit would be realized in the device of Harju if modified to meet the claimed limitations. Finally, no prior art reference teaches or suggests all the claimed limitations.

Thereby, the outstanding rejection has not satisfied any proper step for a *prima facie* case of obviousness.

In view of these foregoing comments, applicants respectfully submit clearly claims 5, 10, and 14 patentably distinguish over Harju.

Moreover, no teachings in Shirasaki '488 or Miyagawa cure the above-noted deficiencies in Harju, and thus the claims also distinguish over the further rejections noted in the Office Action.

In view of the present response applicants respectfully submit the claims as written clearly distinguish over the applied art.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

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